



**BARD**

# **Evaluation Compendium**

# **Questionnaire**

**Research Impact Assessment**

**BARD 40 YR evaluation**

**Presented to BARD Steering  
Committee**

**November 2018**

# **1 Questionnaire Circulated to PIs that were Chosen by the Research Authorities as Outstanding**

## **1.1 Guidelines to Questionnaire**

If you received more than a single BARD, please respond to the questionnaire in relation to the grant/grants which, in your opinion, yielded the greatest impact.

If any of these grants had a shared research topic, please list all the BARD grants relating to the topic on which you are responding

BARD Grant/s # \_\_\_\_\_, \_\_\_\_\_ Collaboration

## **1.2 BARD collaborators**

### **a) To what degree was the mutual US-Israeli collaboration essential to the research results of the BARD grant/s?**

- Synergistic (outputs not possible had the scientists worked separately)
- Complementary (complementary work with added value)
- Minimal

### **b) Has collaboration continued with the US researchers of the BARD grant/s?**

- No
- Yes, through additional BARD awards
- Yes, through other frameworks

## **1.3 BARD as catalyst**

### **a) Were any new research studies initiated as a result of the BARD grant studies?**

- Yes  No

### **b) Are you of the opinion that BARD funding had substantial contribution for initiating a line of research that was subsequently also funded by other agencies?**

- Yes  No

## 1.4 Other academic collaborations

- a) Did the results of the BARD research lead to collaborations with research groups, other than the original BARD co-investigators?

Yes  No

- i. If yes, were the subsequent collaborations on the follow-up research funded?

	Funding Source	Tick Applicable
<b>Funded</b>	BARD Grants	<input type="checkbox"/> Yes <input type="checkbox"/> No
	Other Academic Grants	<input type="checkbox"/> Yes <input type="checkbox"/> No
	Industry/Commercial Funding	<input type="checkbox"/> Yes <input type="checkbox"/> No

- ii. If yes: were the subsequent collaborations informal collaborations, i.e. not mutually funded?

	Type of Collaboration	Tick Applicable
<b>Non Funded</b>	Joint Proposal/s	<input type="checkbox"/> Yes <input type="checkbox"/> No
	Joint Publication/s	<input type="checkbox"/> Yes <input type="checkbox"/> No
	Visiting Scientist/s	<input type="checkbox"/> Yes <input type="checkbox"/> No
	Student Experience in Lab	<input type="checkbox"/> Yes <input type="checkbox"/> No
	Active Participation in Workshops/Round Tables on the Topic	<input type="checkbox"/> Yes <input type="checkbox"/> No
	Inclusion in, or Establishment of a Consortium on the Topic	<input type="checkbox"/> Yes <input type="checkbox"/> No
	Other – Please Specify	

## 1.5 Capacity Building

### 1.5.1 Student training

a) Are you an Israeli or US Researcher?

Israeli  US

b) How many M.Sc., Ph.D and Post-doctoral students/researchers in your research group worked on (i) the cited BARD grant/s and (ii) on follow up projects that emerged from the BARD research?

	Research Position	
Research Position	During the BARD project	In follow-up research associated with the original BARD output
M.Sc.	#	#
Ph.D	#	#
Post-Doctoral scholar	#	#
Other	#	#

If Israeli

Please note how many of the same students that worked on the BARD or related follow-up projects are currently in academia or hold positions in the agriculture/research industry

	Current employment			
Research Position	Academia		Agriculture/Research Industry	
	In Israel	Other	In Israel	Other Countries
M.Sc.	#	#	#	#
Ph.D	#	#	#	#
Post-	#	#	#	#
Other	#	#	#	#

If US

Please note how many of the same students that worked on the BARD or related follow-up projects are currently in academia or hold positions in the agriculture/research industry

Research Position	Current employment			
	Academia		Agriculture/Research Industry	
	In the US	Other	In the US	Other Countries
M.Sc.				
Ph.D				
Post-				
Other				

## 1.6 Agricultural and Technical Results

### 1.6.1 Research application

a) Was there a practical application resulting from the BARD grant or the follow up research that emerged from the BARD grant?

Yes  No

b) If yes, please state the current status of the application

Adopted, in use

Ready to adopt

Needs further transformation

Anticipated; research output acts as input for further research and development

## 1.7 Impact areas

What is/are the main areas of impact, actual or expected, of the BARD projects results and/or application?

Impact Domain	
Agricultural Practice	<input type="checkbox"/>
Environment *	<input type="checkbox"/>
Social *	<input type="checkbox"/>
Policy and Regulation	<input type="checkbox"/>
Economic	<input type="checkbox"/>
Scientific Advances	<input type="checkbox"/>

\* Examples:

Environment: water savings and quality, reduction in pesticide use

Social: improved health, food safety, economic growth in the developing world

## 1.8 Knowledge Transfer

### 1.8.1 Interactions with non-research entities

Were any meaningful interactions established with non-research entities with regard to the BARD research topic and results?

	Engagement and exchange of knowledge	Engagement with funding outcome
Technical Experts	<input type="checkbox"/>	<input type="checkbox"/>
Industry	<input type="checkbox"/>	<input type="checkbox"/>
Government	<input type="checkbox"/>	<input type="checkbox"/>
Farmers/Co-operatives	<input type="checkbox"/>	<input type="checkbox"/>
Venture Capital Funds	<input type="checkbox"/>	<input type="checkbox"/>
Extension Services	<input type="checkbox"/>	<input type="checkbox"/>
Non-Government Organizations	<input type="checkbox"/>	<input type="checkbox"/>
Other (specify entity)	<input type="checkbox"/>	<input type="checkbox"/>

## 1.8.2 Intellectual property and contractual agreements

If previously answered Israeli (in 3.1 b)

- i. Please specify any patents or agreements that emerged from the research.

	Israel
Invention disclosures (NDA's signed)	<input type="checkbox"/> Yes <input type="checkbox"/> No
Patent applications	<input type="checkbox"/> Yes <input type="checkbox"/> No
Issued patents	<input type="checkbox"/> Yes <input type="checkbox"/> No
Agreement with commercial entity (e.g. for scale up, formulation etc....)	<input type="checkbox"/> Yes <input type="checkbox"/> No
Breeding rights	<input type="checkbox"/> Yes <input type="checkbox"/> No
Licenses executed	<input type="checkbox"/> Yes <input type="checkbox"/> No
Spin-offs established	<input type="checkbox"/> Yes <input type="checkbox"/> No
Other (specify)	

- ii. If any of the above were joint US-Israeli, please specify here \_\_\_\_\_

If previously answered US (in 3.1 b)

- i. Please specify any patents or agreements that emerged from the research.

	US
Invention disclosures (NDA's signed)	<input type="checkbox"/> Yes <input type="checkbox"/> No
Patent applications	<input type="checkbox"/> Yes <input type="checkbox"/> No
Issued patents	<input type="checkbox"/> Yes <input type="checkbox"/> No
Agreement with commercial entity (e.g. for scale up, formulation etc....)	<input type="checkbox"/> Yes <input type="checkbox"/> No
Breeding rights	<input type="checkbox"/> Yes <input type="checkbox"/> No
Licenses executed	<input type="checkbox"/> Yes <input type="checkbox"/> No
Spin-offs established	<input type="checkbox"/> Yes <input type="checkbox"/> No
Other (specify)	

If any of the above were joint US-Israeli, please specify here \_\_\_\_\_

Detail any other agreements



## 1.9 Additional Information

We would appreciate short answers, that will focus our understanding of the research contribution, as detailed below:

The issue and objectives of the research	
Who is affected by this issue?	
Activities conducted in order to achieve the objectives	
Stakeholders' collaboration and its contribution	
Scientific advances achieved	
Commercial engagements and patents approved	
Practical agricultural applications	
Environmental impact	
Social impact	
Economic benefit	

## **Guidelines for Research Authorities**

### **Rationale:**

**The guidelines contain indicators that the research authority should consider when deciding upon their choice of outstanding research emanating from BARD funded research over the past 40 years.**

**Outstanding research should have provided a foundation that impacts one or more of the following domains: Scientific, Added Economic Value, Environmental, Social, Policy and Regulatory Action.**

**The projects chosen by the research authorities will be followed up with an in-depth detailed analysis by the BARD evaluation committee (conducted by questionnaires and interviews with the researchers) relating to four main realms: Academic Significance, Research Output and Outcome, Capacity Building and Commercialization.**

**Following the in-depth analysis of the chosen outstanding research/researchers, a subset of projects will be chosen for which an impact pathway and, when relevant, an economic benefit analysis will be conducted.**

**Please note that in parallel to the input of the research authorities on outstanding research over the last 40 years of BARDs activities, a broader evaluation of projects that received BARD grants in the decade between 2002-2014 will be conducted. The PI's of these research grants will be asked to respond to detailed questionnaires focusing on scientific achievements and direct research output of the BARD grant. We will notify you when the questionnaires have been circulated and ask you to ensure your researchers return the questionnaire to us within four weeks of receipt. Information provided by the researchers is an integral part of the BARD evaluation process.**

## **The guidelines:**

**The guidelines below are points for consideration while choosing the outstanding BARD funded projects. There is no need to provide a written response to these considerations, and time can be saved by considering them only for those projects that stand out as exceptional in one or more of the four realms mentioned above.**

### **A: Academic Significance**

When relating to academic significance, please consider the points below:

- The number of publications resulting from the BARD research project, and the papers' citations over the years.
- Consider whether the project was a significant contributing factor to advances in the field. Were novel concepts developed in the project further utilized in additional research (of the recipients of the grant or external researchers) ?
- Consider whether the project paved the way for collaborations with additional research groups either external to or within the PI's institution? Consider whether collaboration continued with the US BARD co-researchers following termination of the BARD grant ?

### **B. Research Output and Capacity Building**

- Were there follow-up grants received based on the BARD research project's output?
- Consider whether the output has been successfully applied in agricultural practices, treatments, choice of crops or varieties, policies , or any other relevant domain ? Has the research output or follow-up research output made an impact for farmers, consumers, environment, regulation, economy, the scientific community etc. ... ?
- Have students or visiting scientists involved in the BARD project continued to pivotal roles in academic or applied fields

### **C. Commercial:**

- Were there patents, licensing, industrial partnerships, companies, products emerging from the research?
- Were any industrial partners involved in the development or scale-up of a commercial product

**The list of outstanding BARD research projects should be provided in the format of a summary table as below (please list from the project considered best down).**

	INSTITUTE NAME:			
	Project Title #	Grant #	PI's - USA	PI's - Israel
1				
2				
.				
.				
n				